

Eric R. Miller, Local Forecaster, Madison, Wis., reports that he has been requested to give instruction in meteorology and climatology at the University of Wisconsin. The course will begin in February and continue until June.

H. W. Richardson, Local Forecaster, reports that a class of 20 students from the Superior, Wis., State Normal School visited the Duluth, Minn., office on January 18; and on January 21, 40 students from the Finnish National College, Smithville, Minn., visited the Duluth, Minn., office and had the workings of the Bureau explained thru an interpreter.

M. R. Sanford, Local Forecaster, Syracuse, N. Y., reports that on December 10, 1908, the class in physical geography of the Fayetteville, N. Y., High School visited the Syracuse office. On December 14, 1908, Mr. Sanford delivered an address at the new High School auditorium; on January 4 and 20 he spoke before local church clubs.

J. Warren Smith, Section Director, Columbus, Ohio, reports that he resumed the regular course in meteorology at the Ohio State University the first week in January. This course of two hours weekly during twelve weeks of the winter term is required of juniors in the College of Agriculture. He also delivered three lectures before 250 students in the Short Course of that college. The class in meteorology at the State University visited the local office on January 14 and 15. A class from the High School for Girls visited the office on the 19th.

C. D. C. Thompson, Observer, gave an informal talk on January 15 before the Mens' Club of Trumbull Avenue Presbyterian Church, Detroit, Mich., about the Weather Bureau and its work.

J. F. Voorhees, Local Forecaster, Knoxville, Tenn., reports that on January 26 and 27 he gave, at the invitation of the Tennessee State Nurserymens' Association, a talk on "The relation of the U. S. Weather Bureau to fruit growing in Tennessee."—C. A., jr.

RECENT ADDITIONS TO THE WEATHER BUREAU LIBRARY.

C. FITZHUGH TALMAN, Librarian.

The following have been selected from among the titles of books recently received, as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies. Most of them can be lent for a limited time to officials and employees who make application for them. Anonymous publications are indicated by a —.

American climatological association.

Transactions. 1908. v. 24. Philadelphia. xxii, 290 p. 8°.

Austria-Hungary. K. k. Central-Anstalt für Meteorologie und Geodynamik. Jahrbücher . . . Jahrgang 1906. Neue Folge. 43. Band. Wien. 1908. 1°.

Bologna. Università. Osservatorio.

Osservazioni meteorologiche 1907. Bologna. 1908. 31 p. 1°.

Bulgaria. Institut météorologique central.

Bulletin sismographique. no. 3. Sofia. 1908. 43 p. 8°.

Calvert, Philip P.

Map showing the distribution of actual mean annual temperatures in Mexico and Central America. (From Biologia Centrali-Americana. London.) 26 x 32 cm.

Chemulpo (Korea). Meteorological observatory.

Results of the meteorological observations made at the Japanese meteorological stations in Korea. 1907. Chemulpo. [1907-8.] 1°.

Dechevrens, Marc.

Les phénomènes de température dans les tourbillons et en particulier dans la haute atmosphère. Roma. 1908. 34 p. 4°. [Estratto dalle Memorie della pontificia accademia romana dei nuovi Lincei. v. 28.]

Dutch West Indies. Inspectie van den Landbouw.

. . . Meteorologische waarnemingen gedaan op de meteorologische stations in den kolonien Suriname en Curaçao. 1907. [Paramaribo. 1908. 16 p.] 8°.

Eiffel, G.

Atlas météorologique pour l'année 1907 d'après vingt-quatre stations françaises. Paris. 1908. 51 p. 24 pl. 1°.

Eredia, Filippo.

La siccità del 1908 nelle Puglie. Roma. 1908. 5 p. 4°.

Sulla misura della neve. Roma. 1908. 8 p. 8°.

Flammarion, Camille.

Annuaire astronomique. 1909. 45 année. Paris. [1908.] 315 p. 12°.

Hamburg. Deutsche Seewarte.

Monatskarte für den nordatlantischen Ozean. Hamburg. 1908. 12 charts. 92 x 62 cm.

Hann, Julius.

Handbuch der Klimatologie. 1. Band: Allgemeine Klimalehre. 3. Auflage. Stuttgart. 1908. xiv, 394 p. 8°.

Haynald Observatorium.

. . . Meteorologische Beobachtungen angestellt zu Boroma in Süd-Africa . . . 1891-1892. Kalocsa. 1906. 75 p. 1°. (Publicationen des Haynald-Observatoriums. 7 Heft. 1896.)

. . . Meteorologische Beobachtungen . . . zu Boroma und Zumbo in Süd-Africa 1893-1897. Kalocsa. 1905. 94 p. 1°.

India. Meteorological department.

Memorandum on the meteorology of India during October and November, 1908 . . . Calcutta. 6 p. 1°.

International meteorological committee.

Report of the 8th meeting . . . Paris, September, 1907. London. 1908. 101 p. 8°.

Inwards, Richard.

Weather lore; a collection of proverbs, sayings, and rules concerning the weather. 3d ed. London. 1898. xii, 233 p. 8°.

Latham, Baldwin, and others.

Upon the effects of rainfall on the flow of sewage. (Great Britain. Royal commission on sewage disposal. Supplementary volumes presented with the fifth report of the commissioners appointed to inquire and report what methods of treating and disposing of sewage . . . may be properly adopted. London. 1908. 198 p. 1°.)

Klossovskii, A.

Page finale des journaux "Revue météorologique" (Travaux du réseau météorologique du sud-ouest de la Russie 1887-1908) et "Annales" de l'Observatoire météorologique et magnétique de l'Université impériale à Odessa. Odessa. 1908. v, 104 p. 8°. (Russian.)

Knott, Cargill Gilston.

The physics of earthquake phenomena. Oxford. 1908. xli, 281 p. 8°.

Kremsmünster. Sternwarte.

Resultate aus den in den Jahren 1905 and 1906 auf der Sternwarte zu Kremsmünster angestellten meteorologischen Beobachtungen. Linz. 1908. 88 p. 8°.

Leipzig. Erdbebenstation des palaeontologisch-geologischen Institutes.

. . . 10^{er} Bericht der Erdbebenstation Leipzig. (Abdruck aus den Berichten der mathematisch-physikalischen Klasse der Königliche sächsischen Gesellschaft der Wissenschaften zu Leipzig. 60. Band. Sitzung vom 20. Juli 1908.)

Martin, Edward A.

Some considerations concerning dew-ponds. South Norwood. (Reprinted from the Transactions of the Southeastern union of scientific societies. 1908.) p. 66-85. 8°.

Merveille, E.

. . . La section magnétique. Édition française. Barcelone. 1908. 74 p. 1°. (Mémoires de l'Observatoire de l'Ebre sis à Roquetas. Département du Collège d'études supérieures de la Cie de Jésus de Tortosa . . . no. 3.)

Mill, Hugh Robert.

The rainfall of Kent. [From the "Water supply of Kent," Mem. Geological survey, 1908, pages 20 to 27.] 1908.

Moore, Edward.

A cloudburst in the high Sierra. (Bulletin of the California physical geography club. Berkeley. v. 2. Dec., 1908. p. 24-27.)

Palmer, W. S.

Wyoming's climate, and its effect on crop production. (In The third Trans-Missouri dry farming congress at Cheyenne, Wyoming, Feb. 23d, 24th, and 25th, 1909 . . . Cheyenne. 1908. p. 51-54.)

Poincaré, Lucien.

. . . The new physics and its evolution. London. 1907. xv, 344 p. 12°.

Prussia. Königliches preussisches aeronautisches Observatorium bei Lindenberg.

Ergebnisse der Arbeiten . . . 1907. Braunschweig. 1908. xxi, 115 p. 1°.

Richter, O. M.

The relation of anticyclonic weather to the prevalence of la grippe and pneumonia on the northern hemisphere with special reference to recent epidemics of pneumonia in Chicago and San Francisco. Chicago. 1908. 11 p. 8°. (Reprinted from the Journal of the American medical association, Aug. 22, 1908, v. 51, p. 660-663.)

[Rykachiev, M. A.]

Liste préalable des travaux sur les régions arctiques publiés en Russie de 1883 à 1906. St. Pétersbourg. 1906. 16 p. 8°.

Sinclair, W. J. H.

. . . The weather and climate of Peterhead. Peterhead. 1905. 30 p. 8°. (Reprinted from the Transactions of the Buchan field club.)

- Smithsonian institution.** Annual report... 1907. Washington. 1908. lvii, 726 p. 8°.
- Tananaive.** Observatoire de Madagascar. Observations météorologiques. 1907. Tananaive. 1908. vi, 271 p. 8°.
- Thomson, J[oseph] J[ohn].** Elements of the mathematical theory of electricity and magnetism. 3d edition. Cambridge. 1904. viii, 544 p. 12°.
- Titchener, E. B.** The psychophysics of climate. (Reprinted from the American journal of psychology. Jan., 1909. v. 20, p. 1-14.)
- U. S. Coast and geodetic survey.** United States magnetic tables and magnetic charts for 1905. Washington. 1908. 154 p. 1°.
- Voeikov, A[leksandr].** Klimat Poliesia. St. Petersburg. 1897. 28 p. 8°. (Russian.)
- West Indies. Imperial department of agriculture.** Barbados. Report of the agricultural work. pt. 3, 1905-7. Barbados. 1908. 99 p. 1°.
- Wiesbaden. Meteorologische Station.** Ergebnisse der meteorologischen Beobachtungen der Station II. Ordnung Wiesbaden im Jahre 1907. Wiesbaden. 1908. 54 p. 8°. (Sonderabdruck aus den Jahrbüchern des Nassauischen Vereins für Naturkunde. Jahrgang 61.)

RECENT PAPERS BEARING ON METEOROLOGY AND SEISMOLOGY.

C. FITZHUGH TALMAN, Librarian.

The subjoined titles have been selected from the contents of the periodicals and serials recently received in the Library of the Weather Bureau. The titles selected are of papers or other communications bearing on meteorology or cognate branches of science. This is not a complete index of the meteorological contents of all the journals from which it has been compiled; it shows only the articles that appear to the compiler likely to be of particular interest in connection with the work of the Weather Bureau. Unsigned articles are indicated by a —

- American geographical society.** Bulletin. New York. v. 41. Jan., 1909.
- Ward, Robert DeC.** Tuberculosis and climate. p. 22-23.
- American society civil engineers.** Proceedings. New York. v. 35. Jun., 1909.
- Matthews, Ernest R., and Watson, James.** The action of frost on cement and cement mortar, together with other experiments on these materials. p. 2-14.
- Astrophysical journal.** Chicago. v. 29. Jan., 1909.
- Humphreys, W[illiam] J[ackson]. Vertical temperature gradients of the atmosphere, especially in the region of upper inversion. p. 14-32.
- Electrical review.** Chicago. v. 54. Jan. 23, 1909.
- An electric hygroscope. [Abstract of paper by Pionchon.] p. 157.
- Electrical world.** New York. v. 53. 1909.
- Carpenter, Daniel S. The theory of lightning. (Jan. 7.) p. 111-113; (Jan. 14.) 158-161.
- Engineering news.** New York. v. 61. Jun. 28, 1909.
- Forests and snow in the high mountains. p. 100.
- Geographical journal.** London. v. 33. Feb., 1908.
- Oldham, R. D. The Italian earthquake of December 28, 1908. p. 185-188.
- M., H. R. The meteorology of the "Discovery." p. 188-191. [Review.]
- Meteorological society of Japan.** Journal. Tokio. 27th year. Dec., 1908.
- Tamura, S. T. Prof. Cleveland Abbe and his work. [Japanese.]
- Nature.** London. v. 79. Dec. 17, 1908.
- Meteorology in South Victoria Land. [Abstract of "National antarctic expedition 1901-4, Meteorology, pt. 1."] p. 202-208.
- Nature.** London. v. 79. Jan., 1909.
- Meteorological reports by wireless telegraphy. [Note on experiments to be conducted by Meteorological office and Deutsche Seewarte.] p. 287. (Jan. 7.)
- O., R. D. The Italian earthquake. (Jan. 7.) p. 287-289.
- Prof. J. M. Pernter. (Jan. 7.) p. 280.
- O., R. D. Recent earthquakes. (Jan. 28.) p. 368-369.
- London, Edinburgh, and Dublin philosophical magazine.** London. 6 series. v. 17. Jan., 1909.
- Morton, W. B. Note of the amount of water in a cloud formed by expansion of moist air. p. 190-192.
- Physical review.** Lancaster. v. 28. Feb., 1909.
- Nichols, Edward L. A study of overcast skies. p. 122-131.
- Popular science monthly.** New York. v. 74. Feb., 1908.
- Hobbs, Wm. H. The latest Calabrian disaster. p. 134-140.
- Science.** New York. v. 29. 1909.
- Reid, Harry Fielding. Mr. Manson's theory of geological climates. (Jan. 1.) p. 27-29.
- Gilbert, G. K. Earthquake forecasts. (Jan. 22.) p. 121-128.
- Pemberton, Henry, jr. Peculiar electrical phenomena. (Jan. 22.) p. 143.
- Scientific American.** New York. v. 100. Jan. 29, 1909.
- Murray, W. J. The scientific aspect of earthquakes and volcanoes. p. 82-83.
- Scientific American supplement.** New York. v. 47. 1909.
- Jagar, Thomas A. The Messina earthquake. Prediction and protection. (Jan. 22.) p. 58.
- The Italian earthquake. [Text reprinted from Nature. Illustrations from several English weeklies.] (Jan. 30.) p. 71-74.
- Annales de géographie.** Paris. 18 année. 15 jan., 1909.
- Lessép, R. Le climat de la Kabylie du Djurdjura. p. 24-33.
- Marc, Lucien. La répartition de la pluie entre la côte de Guinée et le sommet de la boucle du Niger. p. 34-45.
- Denis, Pierre. Le Ceara. p. 46-62. [Includes description of the climate.]
- France.** Académie des sciences. Comptes rendus. Paris. v. 148. 1909.
- Birkeland, Kr. Les orages magnétiques polaires et les aurores boréales. (4 jan.) p. 30-33.
- Garrigou-Lagrange, P. La pluie et les sources en Limousin en 1908. (4 jan.) p. 60-62.
- Angot, Alfred. Sur le tremblement de terre du 28 décembre 1908. (4 jan.) p. 62-63.
- Montessus de Ballore, Fernand de. Sur une interprétation possible des ondes de la phase principale des sismogrammes. (18 jan.) p. 200-201.
- Sola, J. Comas. Le tremblement de terre du 28 décembre 1908, enregistré à l'Observatoire Fabra (Barcelone). (18 jan.) p. 202-203.
- Nature.** Paris. 37. année. 1909.
- De Launay, L. Le cataclysme de Messine. (9 jan.) p. 82-83.
- L., D. L. Le désastre Italien. (16 jan.) p. 103-106. [Illustrated.]
- Fournier, Lucien. La résistance de l'air. (23 jan.) p. 114-117.
- Tremblements de terre et mines. (23 jan.) p. 57, suppl.
- Rerue néphologique.** Mons. Nov., 1908.
- Schmidt, Wilhelm. Observations sur l'orientation des cristaux de glace dans les nuages. p. 273-277.
- Deutsche Mechaniker-Zeitung.** Berlin. 1. Oktober 1908.
- Disch, Johann. Tafel zur ungefahren Ermittelung der Luftfeuchtigkeit für Temperaturen von 40° bis 100°. p. 181-184.
- Himmel und Erde.** Berlin. 20. Jahrgang. Okt., 1907.
- Meckling, L. Die Forschungstätigkeit von S. M. S. "Planet." p. 19-34. [Contains account of aerological observations and methods. Illustrated.]
- Geographische Zeitschrift.** Leipzig. 14. Jahrgang. Dez., 1908.
- Polis, P. Die meteorologische Organisation der Vereinigten Staaten. p. 658-666.
- Lindenberg, Aeronautisches Observatorium. Ergebnisse. Braunschweig. 3. Band. 1907.
- Coym, Arthur. Ueber die absolute Messung der Intensität der Sonnenstrahlung in Freiballon. p. 111-115.
- Prometheus.** Berlin. 20. Jahrgang. 13. Jan., 1909.
- J., —. Neue Versuche mit Blitzableitern. p. 232-234. [Abstract of paper by M. Hopkins.]
- Weltall.** Berlin. 9. Jahrg. 1909.
- Krebs, Wilhelm. Das Erdbeben vom 14. Januar 1907 und seine Begleiterscheinungen. (1 Jan.) p. 103-107; (15 Jan.) 113-122.
- Habenicht, H. Trockenperioden und Erdbeben. (15 Jan.) p. 127-128.
- Wetter.** Berlin. 25. Jahrgang. December 1908.
- Kienast, [Hermann]. Wettervoraussage vor 180 Jahren. p. 265-273.
- Joester, Karl. Die Föhnerscheinungen im Riesengebirge. p. 273-280.
- Rudel, [K.]. Trockenperioden. p. 284-285.
- Polis, P. Drahtlose Telegraphie und Wetterdienst. p. 285-288.
- Zeitschrift der Gesellschaft für Erdkunde.** Berlin. 1908.
- Baschin, Otto. Die klimatischen Verhältnisse der Stadt Berlin. p. 539-548.
- Hellmann, Gustav. Ueber die extremen Schwankungen des Regenfalls. p. 605-615.
- Hemel en dampkring.** Amsterdam. 6. Jaargang. December 1908.
- S., C. Een bezoek aan Hr. Ms. De Ruyter. p. 113-115. [Describes aerological equipment of the Dutch man-of-war De Ruyter.]
- S., —. De hoek tusschen drukverval en windrichting. p. 115-117.
- Volkswijsheld over het weer. p. 127-128. [Gives a number of Dutch weather proverbs.]